ASBESTOS

MARCH, NINETEEN THIRTY-FIVE

..ASBESTOS..

A MONTHLY MARKET JOURNAL DEVOTED TO THE INTERESTS OF THE ASBESTOS AND MAGNESIA INDUSTRIES

A. S. ROSSITER, EDITOR

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The Use of Asbestos in Chemical Industries

By C. F. Mason, *Consulting Chemist*

It is apparent to all that an enormous chemical industry has been developed in this country since the late war during which we were deprived of many synthetic materials when the capitalists became aware that American educated technicians could originate, perfect and produce chemicals upon a large scale. The expansion of this industry has given employment to thousands, has put idle capital to work and has created a market for many well known materials, one of which is Asbestos.

The more important industries which have resulted from this development are synthetic dyestuffs, textiles, fertilizers, resins and the production and marketing of by-products of our original basic industries which are principally agriculture, coal, natural gas, petroleum and metallurgical operations. People who are scientifically minded can see the role which these synthetic substances play in our daily lives; a few examples are transparant umbrella handles, cigarette holders, bottle caps, combs, mirror holders, etc., these being made of synthetic resins.

Other examples are non-freeze solutions for the automobile radiator, high speed gasoline, lead tetraethyl, the improved paint and lacquer finishes upon motor vehicles, cellophane wrappers for almost everything and last but not least rayon garments which could be sold for one third of their present price. By-products of the natural gas industry have made possible no-rub floor waxes, less expensive metal polishes, shaving creams in tubes, combined shoe cleaners and polishes, and some very satisfactory emulsions which are important in the pharmaceutical trade.

All new chemical processes originate in a laboratory where the chemist can use glass and earthenware containers and can make tight joints either with rubber stoppers (protected or unprotected); or when necessary all connecting tubes and containers can be fused together to obtain a closed leak proof system. This apparatus can be

dismantled and modified at little expense during trial runs until the exact conditions have been established. Then the operation is transferred to a small plant where glass, earthen-ware, rubber, etc., are replaced as much as possible by metal or when not possible larger glass and earthen-ware containers where fusion is impossible.

At this point in the process Asbestos often enters in the form of amorphous fibres, cord, sheets, plastic cements, and sometimes suspended in aqueous solutions for special purposes. Altho this pilot plant unit is small, it is in one respect a duplicate of the laboratory apparatus and of the large scale plant unit which is to follow and the two primary objects in erecting and operating it are to find equipment and materials which will withstand long wear and to train the plant employees in the operation so as to obtain a satisfactory product. From this point on, delays for repairs and replacement of parts involve larger costs. Asbestos helps to keep the costs down.

In case an earthen-ware pipe eight inches in diameter is joined to an iron one the flanged cup joint is made tight with asbestos cord and asbestos putty. Glass tubes four inches in diameter are often joined to earthen-ware containers and a tight joint which will withstand four atmospheres pressure can be obtained with the above combination of asbestos materials clamped in by metal holders. Iron and steel pipe lines are joined by flanged joints made leak proof by asbestos gaskets, and other metal containers which are built in sections are gasketed in the same manner.

When the pilot plant operation is proceeding upon a satisfactory basis the plant engineers take charge and design a plant for large scale production where the consumption of asbestos for the purposes enumerated above are multiplied at least five hundred fold. Some additional uses may be for heat shields, fire insulators, workmen's clothes, masks, etc.

A few interesting instances where Asbestos had to be adopted over its cheaper competitor, mineral wool, will

not be out of place here. A large metal kettle was encased in a brick structure with a heating unit underneath, over which an iron pipe six inches in diameter protruded thru the brick wall for the purpose of discharging a molten salt at definite intervals. The opening in the brick wall between the brick and the pipe was packed with mineral wool and the exposed portion was wrapped with mineral wool to prevent the molten salt from cooling and hardening near the nozzle and causing delays in operation.

It still hardened, however, and heavier wrapping did not solve the difficulty. Finally asbestos insulation was resorted to and the trouble ended. Another instance is a concrete fume pit into which five fans discharged fumes from chemical operating rooms and from which another fan discharged these fumes into a brick stack three hundred feet high. Overflow and condensation of these fumes in the pit caused rapid deterioration of the concrete because the condensed solution contained water, sugar, salts (organic and inorganic) and two mineral acids in low concentration. This was an ideal combination for destroying cement and altho drains were introduced and asphalt paint used when the alkali in the cement was neutralized, the trouble continued. It was remedied by application of a synthetic resin varnish into which asbestos and talc had been ground.

Naturally the chemical engineer is wary of using asbestos for joints where a solution of it might contaminate the product and make it a technical one instead of a chemically pure one which commands the higher price; but even tho little information is available upon this point, he is usually forced to use it and trust to luck. One author reported that four types of Asbestos after remaining in contact with 25% Hydrochloric acid for one day, lost from 25 to 3% and that after seven days these outer limits were 50 to 4%; after eight days, they were 55 to 4%. This would indicate that all Asbestos purchased for chemical operations should be tested against the chemical to be made and the sample chosen upon the results of such tests. In the above example, the Asbestos which showed only 3 to 4% loss with Hydrochloric acid would be satisfactory

but the Asbestos which showed 55% loss would have to be replaced often and would contaminate the product to a high degree.

It is obvious that an educational campaign among chemical plant managers, which would keep them ever alert to the merits of Asbestos for the solution of their troubles, followed by an honest effort upon the part of Asbestos producers to find the variety best suited to these diversified needs would open a field from which large profits could be obtained. The layman's notion of Asbestos still persists among technical men; namely that it is for fireproofing and little else but more scientific reports of it in the chemical literature would change this in a short time.

Asbestos Garbed Man in Furnace

Recently a man entered a furnace at a heat of 1400 degrees, remained standing inside it for two minutes, and then came out unburned and unscathed. His asbestos suit explains the miracle.

The man was R. M. Alcock, superintendent of Heston Airport, Middlesex, England. The amazing demonstration took place when he was testing new fire-fighting equipment which it is planned to introduce at British airports.

Asbestos gloves have been used at airports for some time past, but until now nobody has been able to enter the blazing wreckage of an airplane. The new suit, however, makes this possible and with its aid it is hoped that many flyers, who would otherwise be burned to death will be rescued with the minimum of difficulty

The new suit is built on the lines of a diving suit, but weighs only 5½ pounds. For the demonstration a wood furnace was prepared at Heston Airport and heated to 1400 degrees F. Then Mr. Alcock put on the suit, boots and gloves, and walked straight into the furnace, maintaining an unconcerned attitude while within. When he came out he declared that while it had been hot, it had not been in any way uncomfortable.

Electricity Now Shovels the Side Walk

The photograph shows an experimental sidewalk heating installation to prevent snow and ice formation.

Asbestos insulated lead sheathed industrial heating cable was laid 1 in. below the surface of the concrete walk so that the consumption was at the rate of 40 watts per sq. ft. It was estimated that this would cause a temperature rise of about 20 deg. so that snow could be melted and ice formation prevented at outside temperatures as low as 15 deg. above zero.

The installation is at the plant of the Rockbestos Products Corporation, New Haven, Conn., makers of the heating cable. And don't we wish that the City of Philadelphia would adopt the system!

The special cable used is what is known as Soil Heating Cable and it is also used and recommended for heating of the soil in hotbeds or in greenhouses, especially for promoting quick growth of vegetable plants, protection of plants from sudden cold snaps, and so on.

The dream of youth come true — press a button and clear your sidewalk of snow without lifting a shovel! The photo shows heating cable being laid.

The 12 page pamphlet "Faster Growth and Better Plants" describing the uses of soil heating cable reads like a fairy story and makes us decide that the days of miracles — especially the miracles of electricity — are only just beginning. We understand that soil heating has

been used in Norway and Sweden for ten or fifteen years. It not only makes seeds germinate more quickly, plants grow and cuttings root in 20 to 30% less time than by ordinary methods but gives better and stronger plants.

The cost is said not to be exorbitant. Figures can be supplied to anyone interested, but just as an example, with the power rate of 3c the cost of operating an 8 sash bed in Massachusetts, for 34 days, was $6.84 or about 85c per sash.

Shocking the Brake Service Customer Into Action

The brake service business and brake lining manufacturers in general have taken too much for granted. They have assumed that the public knows how to detect faulty brakes. It doesn't! Accident facts prove conclusively that motorists as a whole are blissfully ignorant of the signs of impending failure and go merrily and hazardously on their way until they suddenly find themselves wrapped around a telegraph pole, over the edge of a cliff or disastrously telescoped into another car.

Statistics quoted in the January issue of a leading trade journal, based on an analysis of highway accidents in the State of Ohio, showed defective brakes to be *first* among the causes of accidents due to mechanical defects in the cars. This is typical of the situation in the entire country. People simply do not recognize the signs of coming brake failure *because nobody has ever taken the trouble to tell them.*

Fortunately, something is now being done about it. In a series of advertisements in the Saturday Evening Post and on window display posters in garages and brake service shops, the United States Asbestos Division, manufacturers of Grey-Rock Brake Linings, is waking up the motoring public with startling photographs of the braking sensations that foretell imminent failure of brakes.

No motorist with faulty brakes, seeing these pictures,

can fail to recognize in one or more of them, the exact sensations that have come to him when he has stepped on the brake pedal and failed to come to a perfect, even, balanced stop. He is almost certain to say "That's just how my car felt this morning when I stepped on the brake," as he sees these actual photographs of cars that stop like accordions, rubber bands, springboards, jack-knives, or tail-spins.

The *sensation* is nothing new to the car-owner, but it is news to be told what causes the sensation and what to do about it.

The public needs to be shocked into action and if we are any judge of human nature the Grey-Rock Balanced Brakset national advertising is doing just that.

Duties On Asbestos Products

The reciprocal tariff arrangement between the United States and Belgium provides for a reduction from ¾c to 6/10ths of a cent per pound on gray (natural color) shingles, and a reduction on colored shingles from 1c to ¾c per pound. In other words the duty is now 60c per cwt. on grey shingles and 75c per cwt. on colored, decorated, etc., instead of 75c and $1.00 as formerly.

On February 21st, 1935, the United States Customs Court handed down a decision holding that brake lining composed of asbestos fibre and wire together with a binding agent, coating or filler, imported in lengths of 100 feet, is properly dutiable at 40% under Par 1501 (a) of the Tariff Act of 1930 rather than at 25% under Par. 1501 (b) as claimed by the importer.

"Sensational but not too dangerous is the fire act put on by the Flame Girl at the Casino de Paree — asbestos lines the lower part of the wings, checking the blaze before it can singe her or ignite her costume," says the New York Journal.

RIC-WIL Presents New Cast Iron Underground Conduit

Underground steam lines, run close to or under railroad tracks, present a special problem for insulation and protection. Generally the railroad has a specified minimum requirement for strength and kind of materials which may be used. There is also the matter of design, compactness, durability, water-tightness, proof against vibration, ease of installation and economy.

After more than ten years experience with Cast Iron Conduit Systems and Tile Systems, the Ric-wiL Company of Cleveland have developed a new design of Cast Iron Conduit embodying certain features, all of which are practical and regarded as outstanding improvements.

A new type of cross-ribbed reinforcing is now employed which increases the strength of the sections. These

sections are now made in lengths of two feet each, which give greater strength on account of the reinforcing bell occurring every two feet. These shorter sections are also more practical to handle on the job.

Full open Loc-liP side joints permit continuous cementing without any break, and lugs retain the cement in place against vibration, etc. Internal roller pipe supports (cast integral) obviate any opening in the conduit (desirable with any cast iron system) and speed up installation. Bells are now smaller in diameter than before and slot in the Base Drain Foundation is not required, improving efficiency of drainage system.

Base Drain Foundation may be either Heavy Duty Tile or Cast Iron. This Foundation rests solidly on the trench bottom, supports and cradles the conduit, aug ments its strength, and furnishes adequate under-drainag

Ric-wiL Dry-Pac waterproofed asbestos insulation packed into the conduit to fill all void spaces, thus making a closed construction which eliminates all air space. It prevents air and moisture circulation inside of the con duit. This long fibre, waterproofed asbestos becomes a monolithic, non-capillary, matted mass without cracks, joints or openings, of such structural strength that it cannot settle or suffer from vibration. It has certified conductivity of only .36 B. T. U.

Ric-wiL engineers, with twenty years experience in the manifold problems of underground conduit work, will gladly cooperate with interested parties in solving any problem of underground steam distribution. Their literature is also available on request to the company.

"Asbestos Yarns" is the pleasing title of a four page house organ being published by the Western Asbestos Company of San Francisco. Volume 1, Number 1, covering February and March 1935 has just been received. This first issue is most interesting, well illustrated and altogether a valued addition to our file of house organs published by asbestos firms. We hope the Western Asbestos Company will keep us on their mailing list.

Better Statistics on Asbestos

It is most desirable from everyone's point of view that statistics on asbestos imported into the United States from various countries be on a more comparable basis. We feel certain all producers will agree with this statement.

As now declared, imports from Russia for instance, are stated generally and broadly as "Crude" and "Lower Grades," while those from Canada are given as "Crude," "Mill Fibre" (spinning or textile, shingle and paper fibre) and "Lower Grades."

Also the term "Crude" is used, so far as Russia and some of the other countries are concerned, to designate anything in the shape of raw asbestos which is more or less in rock (rather than fibre) form, regardless of the use to which it is to be put. This gives a most erroneous idea of imports from those countries, and does not benefit anyone, least of all the countries or producers which report or declare their shipments in that manner.

Would it not be preferable to have imports into the United States reported by all countries in classes as nearly uniform as possible, even tho the divisions made between classes might necessarily, at least for a time, be more or less approximated?

If you agree with this, just for a beginning let us suggest that in declaring shipments to the United States, all asbestos producers, regardless of the country of origin of the asbestos being sent into the United States, report the material in four classes as follows:

Crudes (meaning the two highest grades of unopened asbestos used for spinning).

Spinning Fibre (milled fibres above the grade of 0-8-6-2.

Non-spinning fibre below 0-8-6-2 and including 0-0-5-11.

Shorts.

The ideas of all producers in all countries as to this classification are solicited. If you object to the classification tell us so and tell us *why* you object. Then go a

little further and tell us what classification *you* think should be followed in declaring shipments to the United States.

Let us have a worldwide discussion of the subject with the idea of finally adopting a system of reporting imports into the United States, in one specified way, covering specific classes of material, no matter whether the asbestos comes from Canada, Russia, Finland, Cyprus, Italy or any other country in the world.

In other words let us work toward *uniform* statistics. Will every producer of asbestos who reads this article write us on this subject?

Asbestos In Western Australia

According to information received from Perth, while the present production of asbestos in Western Australia constitutes only a small proportion of the world's output, pioneer work suggests that there is an extensive and valuable field in that country. This field is now ready for development and Sir Hal Colebatch, Agent-General for Western Australia, is sanguine about its prospects.

So far only a few tons have been taken from the deposits near Onslow, but the seam has been located and explored and is known to extend for at least eight miles from the present working.

An asbestos expert who has investigated the Western Australian product states that the asbestos mined is remarkably clean. Western Australia hopes to obtain valuable trade thru the development and export of her deposits.

An inquiry reaches us for information as to a process for "annealing asbestos fibre to cloth to make it fireproof." If any reader can give us any information on this process we will be glad to put them in touch with the inquirer.

MARKET CONDITIONS

General Business.

The reports from business during the past month have supplied indications that the upswing which began last October is finally levelling off, and when all the February figures are in it is probable that they will show little or no gain in productive activity over the January rate. This is in accord with conservative expectations. The rise in industrial operations in preparation for spring business started early this year. Hence an early flattening out may be accepted as inevitable, and as essentially one of the seasonal fluctuations in activity, tho occurring before its accustomed time.

Thru December and January the rise in industrial output was rapid. It lifted the general rate of operations, measured with allowance for differences between seasons, to the highest point since the summer of 1933 . . . This advance fulfills all reasonable expectations, in view of the unemployment, the continued stagnation of the capital markets and the construction industries, and all the uncertainties hanging over the economic situation. It has sent 1935 off to a good start, and the occupations are favorable seasonal factors whose effects are still to be felt . . . Business men are hopeful in their expectations, but conservative in their operations. It has been believed in some lines that the gold clause decisions, by removing one element of uncertainty, would stimulate the markets, especially in textiles but the stimulus was shortlived and the volume of business disappointing . . . Wholesale business in most lines has made a poorer showing in February than in January.[1]

These are a few of the most important factors—probably pages could be written on the general market situation but the above gives a general resume, condensed as much as possible.

Asbestos. Raw Material.

There has been no change during the past month.

[1]Extracts from the National City Bank letter for March.

Prices remain the same. Shipments fair. The Canadian Mines are looking forward to a considerable increase in business in the spring.

Asbestos. Manufactured Goods.

Textiles. This market remains practically unchanged. Prices hold fairly steady. Little, if any, change in volume.

Brake Lining. While we have not been able to get any definite comment on this market the fact that the automotive industry is showing such satisfactory sales, and the further fact that spring and the lure of sunny days are not far off, are sufficient to make the brake lining industry one of the most hopeful in the asbestos line.

Insulation. High Pressure. Sales continue in volume comparable to those in the Steel Industry. Until heavy industries are revived no real improvement may be expected. Prices remain firm with profit diminished due to increasing cost of labor, shorter hours, higher hourly rate.

Insulation. Low Pressure. Demand in this market as well as in paper and millboard is very disappointing. Prices are fairly steady.

Asbestos Cement Products. Sales of asbestos cement products for the first part of 1935 compare favorably with the similar period last year, showing an increase in volume which, altho small at this time of the year, is a good indication.

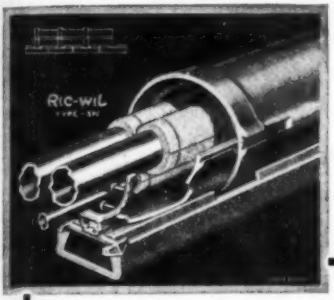
There is also a good demand for the industrial products such as flat sheets and corrugated sheets.

The above represent the opinions of men in close touch with the respective markets. Send us your ideas.

The Norristown Magnesia & Asbestos Company on March 1st placed on the market their new type of package for Asbestos cement, under the name of "Dens-Pac."

This package, as the name implies, provides asbestos cement in such compact form that it takes much less storage room. Another feature is that, being in carton form it is more easily piled up in the warehouse.

The Norristown Company will supply a miniature package of Dens-Pac upon request, to anyone interested.



In addition to various designs of standard Tile Conduit (with several types of insulation)—Ric-wiL makes two Heavy Duty Types—Super-Strength Tile and also Cast Iron, providing great physical strength for supporting traffic loads.

The Key to New Business— Better Conduit Systems

Ric-wiL Type SPC Conduit shown above, with sectional pipe covering for insulation, is one of several standard Ric-wiL designs. Other methods of insulation are offered, including Ric-wiL Dry-paC long fibre African asbestos, a waterproof insulation, hand packed, which retains its shape and keeps the cost down. Exclusive features of Ric-wiL construction keep *any* pipe covering dry. You can, if you prefer, use a Ric-wiL system with a pipe covering of your own choice. We furnish complete installation instructions and, if desired, engineering supervision. Write for Bulletin 32.

The Ric-wiL Company, 1562 Union Trust Bldg., Cleveland
New York San Francisco Chicago
Agents in principal cities

REG. U. S. PAT. OFF.

RIC-WIL

CONDUIT SYSTEMS FOR UNDERGROUND STEAM PIPES

CONTRACTORS AND DISTRIBUTORS PAGE

BETTER HOUSING FACTS

The total number of repair and improvement permits issued during the year 1934 in more than 750 cities having populations of more than 10,000 each was found to have been 24 per cent greater than the total granted for these purposes in the same cities in 1933.

A bill to make the Housing Division a permanent part of the Department of the Interior will shortly be introduced in Congress by Senator Wagner, New York, under whose direction the bill is being groomed for presentation.

A chain of meetings, offering contractors, architects, building supply dealers, and builders complete instructions on how to cooperate fully on the Better Housing Program of the Federal Housing Administration, has been organized in 33 key cities in the United States. The plan automatically expands and extends such meetings to all parts of the country.

Nearly two-thirds of the stores in the United States are in need of modernization. It has been estimated that a billion dollars could be well spent on the 967,000 outmoded buildings among the million and a half stores now in operation. Uninviting exteriors and interiors so outmoded that stock cannot be well displayed are contributing causes to lack of profits of so many stores.

ACTIVITIES OF THE INSULATION CONTRACTORS' DIVISIONAL CODE AUTHORITY

Meeting of the Insulation Contractors' Divisional Code Authority was held on February 18th and 19th, 1935, at New York City.

The National Recovery Administration has approved a Survey Bureau for the New York Metropolitan District. This is the first such survey bureau to be approved under the provisions of Chapter XIV of the Construction Code. It is quite possible that this is the first step in the adoption of approved survey bureaus in other Chapters of the Construction Industry. The destructive prices brought about by the use of incorrect quantities in estimating the cost of a job has long been one of the greatest evils of the Construction Industry. It has often resulted in forcing the contractor who is properly equipped with

an efficient estimator to meet the price of the contractor who does not know how to properly interpret construction plans and specifications. The N. R. A. is watching with great interest the development of these approved survey bureaus in the Insulation Contractors' Division as it represents the first attempt by the Government to protect the contractor against the use of incorrect quantities by his competitor.

The next important step necessary in the correction of destructive prices in this industry is the preparation of a Cost Finding and Estimating System as provided in Chapter XIV. The I. C. D. Code Authority is now at work on this and about ready to submit a system to N. R. A. for approval.

The Committee that was appointed to prepare a minimum skilled wage amendment to Chapter XIV is working with the Local Code Agencies to secure all the necessary information.

Sixteen Bid Depositories have been approved to date. They are:

Charles M. McGarvey, Trust Officer, National Commercial Bank & Trust Co., State Street, Albany, N. Y.
The Central Bid Depository of Buffalo, Chamber of Commerce Office, Main and Seneca Streets, Buffalo, N. Y.
The Central Bid Depository of Cleveland, 1700 Builders Exchange Bldg., 45 Prospect Avenue, N. W., Cleveland, Ohio.
M. E. Boyer, 1448 E. 7th Street, Charlotte, N. C.
The Atlanta Builders Exchange, Bona Allen Building, Atlanta, Ga.
E. T. Archer, Care E. T. Archer & Co., 112 W. 9th St., Kansas City, Mo.
The Baltimore Building Congress, 1109 Fidelity Bldg., Baltimore, Md.
George S. Stuart, Secretary, Builders Exchange and Employers Association of Phila., 701 Brown Bldg., Philadelphia, Pa.
Manufacturers Trust Co., Trust Dept., 55 Broad St., New York City.
The Allegheny County Bid Depository, 1033 Fulton Bldg., Pittsburg, Pa.
The Lincoln Alliance Bank & Trust Co., 183 E. Main St., Rochester, N. Y.
The Chimes Building Office, First Trust and Deposit Co., 109 W. Onondaga St., Syracuse, N. Y.
V. D. Warren, Secretary, Spokane Chapter A. G. C., W. 515 First Ave., Spokane, Washington
F. Burton, 518 Railway Exchange Bldg., Portland, Oregon.
W. A. Osborne, Secretary, Construction Council of Tacoma, 230 Tacoma Bldg., Tacoma, Washington
Builders Exchange, (O. J. Tollefson, Mgr.) 103 Securities Bldg., Seattle, Washington

Fees, Territories served by these Depositories and other information will be cheerfully supplied by the I. C. D. Code Authority at 122 E. 42nd St., New York City.

BUILDING

Construction awards in the 37 eastern states during January exceeded the total for December by about $7 million or almost 8 per cent according to F. W. Dodge Corporation. The January total of $99,773,900 for all classes of construction, however, was only 53 per cent as great as the total of $186,463,700 reported for January, 1934. In making comparisons with a year ago it should be recalled that at that time contract-letting

under the PWA program reached its peak.

Residential building contracts let in January, 1935, were 53 per cent greater in aggregate value than in December, 1934; at the same time *a gain of about 49 per cent was shown when contrasted with the total for January, 1934.* Tho these percentage gains are gratifying the January dollar total of residential building contracts, amounting to $22,410,200 for the 37 eastern states, was only about 40 per cent as great as in January, 1931, itself a depression period.

Commenting on the first quarter outlook for residential building the Dodge bulletin says: "For the first quarter of 1935 it is probable that residential building awards will exceed the total of $57,706,800 for the corresponding period of 1934 but it is not likely that the percentage gain for January can be maintained for the quarter as a whole."

AUTOMOBILE PRODUCTION

Production of automotive vehicles during January 1935 in the United States and Canada totalled 303,372; compared with 163,811 in January 1934. This showed quite an increase over December when the total was 185,919 for 1934 and 83,827 for the same month in 1933.

New Brake Reliner

The PG (Proving Ground) Brake Reliner being marketed by the Raybestos Division, consists of a pedestal riveter and a bench drilling and counter-sinking unit.

This Reliner is capable of handling all brake shoes and bands from the smallest to the longest. Its fundamental principle is that of the old Wright & Corson Machine, many of which are still operating after a dozen years of little or no service maintenance.

The features of this new Reliner are: Spindle construction with two bronze bearings with figure "8" oil grooves, with dustproof oil covers. End thrust is taken on an important Ball Bearing and an adjustment is provided for taking up wear. Belt drive with modern "V" construction. 1/4 H. P. General Electric Motor—the best obtainable for this particular job—it gives a world of power and you can't stall it, no matter how tough the countersinking job is.

The Riveting Unit is rugged, deep-jawed with sufficient amount of metal at points that take the strain. It has a wide and sturdy pedestal base, malleable iron riveting arm and treadle. Tool holders are designed to take the famous Raybestos tapered shank tools assuring snug fit and minimum breakage.

Anyone interested can obtain further information by addressing the Raybestos Division, Bridgeport, Conn.

ASBESTOS STOCK QUOTATIONS

		February 1935			
	Par	Div.	Low	High	Last
Asbestos Corpn. (Com.) New V. T.	np	–	8	10⅜	8
Carey (Com.)	100	–	No Sales		
Carey (Pfd.)	100	6	No Sales		
Certainteed (Com.)	np	–	4½	5½	5
Certainteed (Pfd.)	100	7	25	30½	27
Garlock Packing (Com.)	np	–	24½	25	25
Johns-Manville (Com.)	np	–	46¼	55	48
Johns-Manville (Pfd.)	100	7	120	125	122
Raybestos-Manhattan (Com.)	np	60c	18¾	21	19
Ruberoid (Com.)	np	1	44¾	46¼	46¼
Thermoid (Com.)	np	–	3	4	3⅜
Thermoid (Pfd.)	100	7	28	28	28

ASBESTOS

Africa (Rhodesia)

(Statistics published by Rhodesia Chamber of Commerce)

	December 1934 Tons (2000 lbs.)	Value
Bulawayo District		
Croft, (Afr. Asb. Mng. Co., Ltd.)	15.40	£ 192 10 ..
Nil Desperandum (Afr. Asb. Mng Co., Ltd.)	245.80	3,072 10 ..
Shabanie (Rho. & Gen. Asb. Corp., Ltd.)	2,392.40	29,904 18 9
Victoria District		
D. S. O. (Mashaba Rho. Asb. Corp. Ltd.)	45.00	562 10 ..
Gath's & King (Rho. & Gen. Asb. Corp. Ltd.)	285.07	3,563 8 9
	2,983.67	£37,295 17 6
December 1933	*1,725.23*	*£21,565 6 4*

SUMMARY FOR THE YEAR—RHODESIA (Tons—2000 lbs.)

January	2,674.65	2,520.15	July	3,652.92	2,993.94
February	1,872.30	2,328.47	August	2,519.72	3,349.73
March	2,256.03	2,543.07	September	2,624.42	3,098.88
April	3,664.30	2,263.93	October	1,684.16	1,894.52
May	3,699.77	2,725.57	November	1,104.84	2,096.35
June	2,703.25	2,415.23	December	1,725.23	2,983.67
			Total	30,181.59	31,213.51

Africa (Union of South)

(Statistics published by Dept. of Mines & Industries of U. of S. A.)

	December 1933 Tons (2000 lbs.)	Value	December 1934 Tons (2000 lbs.)	Value
Transvaal				
Amosite	238.30	£ 2,412	457.00	£ 4,623
Chrysotile	544.50	7,015	1,088.30	10,486
Cape				
Blue	304.13	5,569	259.21	4,348
	1,086.93	£14,996	1,804.51	£19,457

ASBESTOS

SUMMARY FOR THE YEAR — UNION OF SOUTH AFRICA

(Tons — 2000 lbs.)

	1933	1934		1933	1934
January	889.39	1,290.70	July	1,465.32	1,596.80
February	544.73	2,191.73	August	1,689.29	1,591.02
March	1,740.16	1,760.10	September ..	1,364.65	974.47
April	1,180.73	861.84	October	1,371.20	1,364.53
May	1,663.27	1,317.54	November	1,294.76	1,598.10
June	1,586.18	1,242.54	December ..	1,086.93	1,804.51
				15,876.61	17,593.88

SUMMARY FOR THE YEAR (UNION OF SOUTH AFRICA)

By Varieties

	1933		1934	
	Tons (2000 lbs.)	Value	Tons (2000 lbs.)	Value
Transvaal				
Amosite	3,089.75	£ 31,099	3,756.42	£ 37,104
Chrysotile	9,572.20	105,715	11,025.30	114,241
Blue	.....	.....	1.40	15
Cape				
Blue	3,224.66	60,306	2,810.76	51,673
	15,886.61	£197,210	17,593.88	£203,033

Cyprus.

(Figures supplied by the Cyprus Trading Corporation, Ltd.)

1934	6,779 tons	(2240 lbs.)
1933	3,486 tons	(2240 lbs.)

Imports of Raw Asbestos Into Germany [1]

	Year of		
	1932	1933	1934
	Tons of 1000 kilos		
From Canada	3,481	5,052	5,848
From South Africa	1,301	3,021	2,946
From Russia	2,222	3,378	10,038
From Other Countries	577	1,261	1,320
	7,581	12,712	20,152

[1]Figures supplied by "Tropag" Asbest & Erzimport of Hamburg

IMPORTS AND EXPORTS

Imports into U. S. A.

(Figures published by U. S. Dept. of Commerce)

Unmanufactured Asbestos.

	Dec. 1933 Tons (2240 lbs.)	Dec. 1934 Tons (2240 lbs.)
Africa (Br. S.)	269	45
Canada	8,525	8,101
Cyprus, Malta & Gozo	185	.....
Italy	180	118
Soviet Union (Russia)	164	.....
United Kingdom	1	.....
	9,324	8,264
Value	$388,578	$238,841
Tabulation of Crudes:		
Africa (Br. S.) Crude	269	45
Canada (Crude)	56	70
Italy (Crude)	1	1
United Kingdom (Crude)	1	..
Canada (Mill Fibre)	4,476	2,605
Canada (Lower Grades)	3,993	5,426
Cyprus, Malta & Gozo (Lower Grades)	185	.....
Italy (Lower Grades)	179	117
Soviet Union (Russia) (Lower Grades)	164	.....
	9,324	8,264

Manufactured Asbestos Goods:

	Dec. 1933 Value	Dec. 1934 Value
Austria	$ 556	$1,434
Canada	82	76
Germany	935	.....
United Kingdom	3,068	2,566
	$4,641	$4,076

ASBESTOS

SUMMARY FOR THE YEAR—U. S. A.

Imports into U. S. A.

Unmanufactured Asbestos.	Year 1933 Tons (2240 lbs.)	Year 1934 Tons (2240 lbs.)
Africa (Egypt)	....	89
Africa (Br. S.)	2,075	1,621
Canada	100,840	100,946
Cyprus, Malta & Gozo	2,030	2,107
Finland	33	92
Germany	37	.....
Italy	852	265
Russia	867	2,319
United Kingdom	11	22
Venezuela	10	...
	106,755	107,461
Value	$3,439,683[1]	$3,278,003

[1]Exclusive of April 1933 figures which were not published by U. S. A.

Unmanufactured—By Grades.	Year 1933 Tons (2240 lbs.)	Year 1934 Tons (2240 lbs.)
Africa (Br. S.)—		
Crude	2,075	1,621
Africa (Egypt)—		
Lower Grades	.....	89
Canada—		
Crude	790	976
Mill Fibre	41,541	37,464
Lower Grades	58,509	62,506
Cyprus, Malta & Gozo—		
Lower Grades	2,030	2,199
Finland—		
Lower Grades	33	34
Germany—		
Crude	5	.....
Lower Grades	32	.....
Italy—		
Crude	123	12
Mill Fibre	.....	....
Lower Grades	729	220
Russia—		
Crude	164	587
Mill Fibre	303	.....
Lower Grades	400	1,731
United Kingdom—		
Crude	11	22
Venezuela—		
Lower Grades	10	.....
	106,755	107,461

Imports Into U. S. A. (Continued)

Manufactured Asbestos

	Year 1933 Value	Year 1934 Value
Austria	$ 1,042	$ 4,030
Belgium	2,921	8,572
Canada	1,947	2,540
Czecho-Slovakia	.....	44
France	794	....
Germany	11,402	14,141
Hungary	150	136
Italy	1,746	445
Japan	169	36
Soviet Union (Russia)	708	....
Spain	155	....
Switzerland	28	....
United Kingdom	19,408	31,999
	$40,470	$61,943

Exports of Raw Asbestos from Canada

(Figures by Dominion Bureau of Statistics)

	January 1933 Tons (2000 lbs.)	January 1933 Value	January 1934 Tons (2000 lbs.)	January 1934 Value
United Kingdom	273	$ 18,419	48	$ 3,784
United States	3,343	171,991	4,211	224,816
Australia	80	4,000	120	6,000
Belgium	2	400	.....	.....
France	13	5,850	.....	.....
Germany	475	40,850	90	5,673
Italy	138	6,210	55	5,500
Japan	2,703	89,670	1,218	64,960
Spain	44	1,980	22	715
Netherlands	....	.....	55	4,950
	7,071	$339,370	5,819	$316,398
Sand and Waste—				
United Kingdom	50	1,000	.....	.....
United States	3,923	54,028	5,140	78,817
Germany	80	1,600	99	2,178
Japan	5	62	10	220
	4,058	56,690	5,249	81,215
	11,129	$396,060	11,068	$397,613

Exports from U. S. A.

Exports of unmanufactured asbestos during December 1934 amounted to 99 tons valued at $7,174; compared with 86 tons, valued at $8,559 in December 1933.

Exports of Manufactured Asbestos Goods:

	December 1933		December 1934	
	Pounds	Value	Pounds	Value
Paper, Mlbd. & Rlbd.	25,582	$ 2,484	104,218	$ 9,263
Pipe Covering & Cement	192,496	9,395	143,092	11,531
Textiles, Yarn and Pkg.	95,533	48,662	104,824	45,950
Brake Lining—				
Molded and Semi-molded	.....	49,920	.....	44,807
Not molded	118,438[1]	19,055	118,712[1]	17,780
Magnesia and Mfrs. of	134,054	9,958	219,628	12,638
Asbestos Roofing	433[2]	1,065	270[2]	1,369
Other Manufactures	141,079	12,814	108,605	13,612

[1]Lin. Ft. [2]Sqs.

SUMMARY FOR THE YEAR

Exports from U. S. A.

Exports of unmanufactured asbestos during the year 1934 amounted to 1,490 tons valued at $94,182; compared with 1,230 tons, valued at $88,521 during 1933.

Exports of Manufactured Asbestos Goods:

	1933		1934	
	Pounds	Value	Pounds	Value
Paper, Mlbd. & Rlbd.	878,843	$ 62,851	1,203,584	$ 96,154
Pipe Covg. & Cement	1,819,046	93,936	2,779,012	126,929
Textiles, Yarn & Pkg.	1,035,849	510,186	1,239,020	593,886
Brake Lining—				
Molded & Semi-molded	.....	468,549	.....	607,193
Not molded	1,651,425[1]	256,018	1,641,333[1]	255,018
Magnesia & Mfrs. of	1,389,808	9,836	2,553,727	241,410
Asbestos Roofing	85,532[2]	150,283	26,457[2]	75,254
Other Manufactures	1,677,012	109,481	1,598,112	146,670

[1]Lin. Ft. [2]Sqs.

Imports and Exports by England.

Imports of Raw Material:

	January 1934		January 1935	
	Tons (2240 lbs.)	Value	Tons (2240 lbs.)	Value
Africa (Rhodesia)	926	£20,855	687	£16,204
Africa (Union of South)	437	12,256	808	11,280
Australia	.....	11	.....	.....
Austria	.....	6	10	69
Belgium	2	26	.....	.....
Canada	257	4,761	25	414
Cyprus	132	2,400	52	761
Finland	5	34	15	100
Italy	11	142	.....	.....
Soviet Union (Russia)	52	513	33	1,103
U. S. of America	55	705	27	394
	1,877	£41,699	1,657	£30,325

Imports and Exports by England (Continued)

Exports of Asbestos Manufactures:

	January 1934		January 1935	
	Cwts.	Value	Cwts.	Value
To Irish Free State	3,225	£2,570	2,198	£2,329
To British India	5,371	7,198	2,644	7,022
To Australia	750	4,941	983	6,136
To Other British Countries	11,553	19,168	8,199	15,873
To Netherlands	1,057	3,589	1,008	3,052
To Belgium	327	2,372	840	3,455
To France	968	2,528	564	3,013
To Italy	455	3,821	345	2,727
To Other Foreign Countries	5,894	21,709	10,304	32,896
	29,600	£67,896	27,085	£76,503

THIS AND THAT

The Thermoid Brake Block described on page 14 of our February number contains a large percentage of asbestos. The article did not specifically state this fact and some of our readers have raised the question.

The movies often use asbestos suits in fire scenes of various sorts. One of the latest was "Dante's Inferno" in which Claire Trevor wears an asbestos costume.

When in need of foremen, salesmen, etc., we hope our asbestos friends will get in touch with us. Right now we know of a textile foreman who wants a position. Does any asbestos textile firm need such a man? He has had a number of years experience.

A Sales Booster Cabinet has been added to the Grey-Rock Balanced Brakset Line. The cabinet is very attractive, and can be used as a counter display or hung on the wall. The Grey-Rock Line as most of our readers know is produced by the United States Asbestos Division at Manheim, Pa.

NEWS OF THE INDUSTRY

Birthdays. The following gentlemen are on our birthday list this month: G. C. Hall, Secretary, National Asbestos Mfg. Co., Jersey City, N. J., whose birthday falls on March 17th; Herbert E. Sunbury, Vice President, Allbestos Corporation, Philadelphia, March 21st; Lyndon E. Adams, President, Anchor Packing Co., Philadelphia, Pa., March 21st; Glendon A. Richards, President, Richards Mfg. Co., Grand Rapids, Mich., April 1st; George Kanzler, President, Smith & Kanzler, Elizabeth, N. J., April 4th; Charles Almy, Jr., President, Multibestos Co., Cambridge B., Mass., April 6th; P. H. Jamieson, Manager, Jamieson Asbestos Co., Montreal, P. Q., Canada, April 13th. To all these gentlemen we extend birthday greetings and congratulations.

Raybestos-Manhattan, Inc., earned net income of $750,891.59 in 1934, equivalent to $1.17 per share, comparing with net income of $685,198.61 or $1.07 per share, during the year prior.

The total assets amounted to $16,204,367.07, and included $7,722,694.32 of current assets, equivalent to ten times the current liabilities of $771,409.31 at the close of the year. The company had no banking or funded debt, or other capital obligations. The book value of its 641,300 shares of stock outstanding, after deducting the 34,712 shares held in the treasury, was $22.93 per share. The net current assets represented $10.84 per share of which cash and marketable securities amounted to $4.16 per share.

The Directors declared a dividend of 25 cents per share, payable March 15, 1935, to stockholders of record at the close of business February 28, 1935.

Charles A. Wright, formerly Vice President of Plant Rubber & Asbestos Works, San Francisco, Calif., on February 11th sailed thru the Golden Gate on the good ship "Golden Star" on an extended oriental trip. His family accompanied him.

Just before sailing the Asbestos fraternity of the Bay District fore-gathered on the deck and, with appropriate speeches, presented Mr. Wright with a fine pair of binoculars, suitably engraved. The gift was a token of the high esteem in which Mr. Wright is and always has been held by the Asbestos Trade.

Turner-Newall, Limited. Yet another important string is being added to the bow of the largest asbestos firm in the world. The Directors of Turner-Newall, Limited, have, we are informed, just decided to purchase the modern asbestos cement factory at Rhoose, near Cardiff, Wales, owned by Aberthaw & Bristol Channel Portland Cement Company.

The existing business of manufacturing asbestos cement products at Rhoose will be carried on by Turners Asbestos Ce-

ment Co., a branch of Turner & Newall, and a new sales office is to be opened at Cardiff in the near future. No indication is given of the amount of the purchase but this is believed to be substantial. The Aberthaw company is retaining its Portland cement works at Rhoose, these not being concerned in the deal.

Asbestcementindustrie "Asbestona" N. V., has just been founded, the works being situated at Harderwijk on the former Zuiderzee, Holland. The offices are in Amersfoort, 6 Hagenlaan. This firm will manufacture various asbestos cement products.

Johns-Manville Corporation. Annual report of the Johns-Manville Corporation for the year ending December 31, 1934, has been issued as of March 1st, 1935. The Consolidated Balance Sheet shows that total of all Current Assets above all Liabilities amounted to $10,778,782 at the end of the year, an increase of $444,804 for the year, after deducting $1,000,000 used to capitalize the Johns-Manville Credit Corporation.

In July, 1934, the final accumulation on the Preferred Stock was paid so that the Preferred Dividend payments are now on a current basis with all past accumulations paid up.

Consolidated Income Account, comparing the years 1934 with 1933, follows:

	Year ended Dec. 31, 1934	Year ended Dec. 31, 1933
Sales, net of returns and allowances	$27,300,247.59	$21,232,272.16
Less Mfg. cost, selling and administrative expenses, etc.	24,664,108.43	19,488,064.71
Net income before depreciation, depletion and obsolescence, income taxes and foreign exchange fluctuation	2,636,139.16	1,744,207.45
Deduct:		
Depreciation	1,266,656.94	1,526,250.10
Depletion	112,896.13	109,013.10
Special provision for depletion and obsolescence of mineral properties	400,000.00	
Provision for income taxes	163,075.01	66,999.22
	1,942,628.08	1,702,262.42
Net income before foreign exchange fluctuation	693,511.08	41,945.03
Gain due to foreign exchange fluctuation	56,291.43	63,386.00
Net Income	$ 749,802.51	105,331.03

Johns-Manville, as a keynote in its 1935 campaign and as a move toward more effective selling on the part of contractors, has produced a feature talking motion picture, "Before and After," which is to be used at contractor meetings thruout the country this year.

It has been felt for a long time that home owners are receptive toward buying home improvements and the contractors have been anxious to help them, but that, generally speaking, the contractors have lacked the equipment for doing the job. Johns-Manville has created a new 1935 set of sales helps for the contractor and this moving picture tells him how to use these tools.

The picture was shown for the first time at the J-M Eastern Sales Convention in New York on February 15th, and will in turn be shown in all sections of the country by J-M dealers to their contractors. By the end of the year over 11,000 dealers and contractors will have seen it.

"TROPAG" Asbest. & Erzimport, of Hamburg, Germany. As a result of the law relating to the conversion of capitalized companies, this company has been converted into a limited company, as of January 1st, 1935, while their entire assets have been transferred to the new company. Their former director and partner, Oscar H. Ritter, is again an active partner and will conduct the business on the same basis and devote the same personal attention and effort to it as heretofore. The company as our readers know, is agent for the Johnsons Company of Thetford Mines, P. Q., Canada.

Just twenty-five years ago Mr. Ritter started in business in London,—importing foreign raw materials for European Industry.

The Canadian Asbestos Company of Montreal, have recently issued a rather clever folder enclosing a pencil containing lead of Canadian Graphite. The inference, of course, is that you write your order for Canasco Goods with the pencil provided.

The Asbestos Industry of Southern Rhodesia is the title of an article which appears in the January 1935 issue of the Rhodesian Mining Journal.

Articles on Asbestos. Recent issues of the India Rubber Journal contain the following articles: Asbestos for Roofing Slates in the February 2nd number; Asbestos and Zirconia in the February 9th issue; Asbestos for Fireproof Doors in the February 16th issue.

U. S. Asbestos Division. Franklin A. Miller, Replacement Sales Manager for Grey-Rock Automotive Products, announces the appointment of five new men,—Wm. T. Brangham in the Pittsburg territory; D. L. Gardner and J. P. Kelleher in the Chicago territory; H. A. Stephens in the San Francisco territory; and W. R. Hutchison in the Atlanta territory. All these men have had long experience in the Automotive Replacement Parts industry and it is expected that their appointment will materially strengthen the Grey-Rock sales force.

ASBESTOS

PATENTS

Porous Material and Process of Making Same. No. 1,985,994. Granted on January 1st to Harry E. Holcomb, Stratford, Conn. Assignor to Johns-Manville Corporation, New York. Application January 13, 1932. Serial No. 586,455.

Described as a lightweight, permeable article comprising fibres forming intercommunicating voids between them and disposed in the form of nodules, a porous protein adhesive distributed over the nodules cementing them together and providing communication between the said voids and an outer surface of the article.

Insulating Covering for Pipes. No. 1,986,952. Granted on January 8th to Jesse M. Weaver, Charleston, S. C., assignor to Raybestos-Manhattan, Inc., Passaic, N. J. Application July 17, 1931. Serial No. 551,329.

Described as an insulating covering for tubes and pipes made up of a series of relatively short sections, each comprising one or more loosely twisted strands of fibrous insulating material wound in a series of layers to form a loose, fibrous, well-sustained mass and containing a large number of voids each section having a central opening adapting each section independently sealed onto the pipe to be insulated.

Method of Obtaining Magnesium Carbonate. No. 1,988,524. Granted on January 22nd to Horace E. Stump, Lakeville, Conn. Application August 20, 1931. Serial No. 558,331.

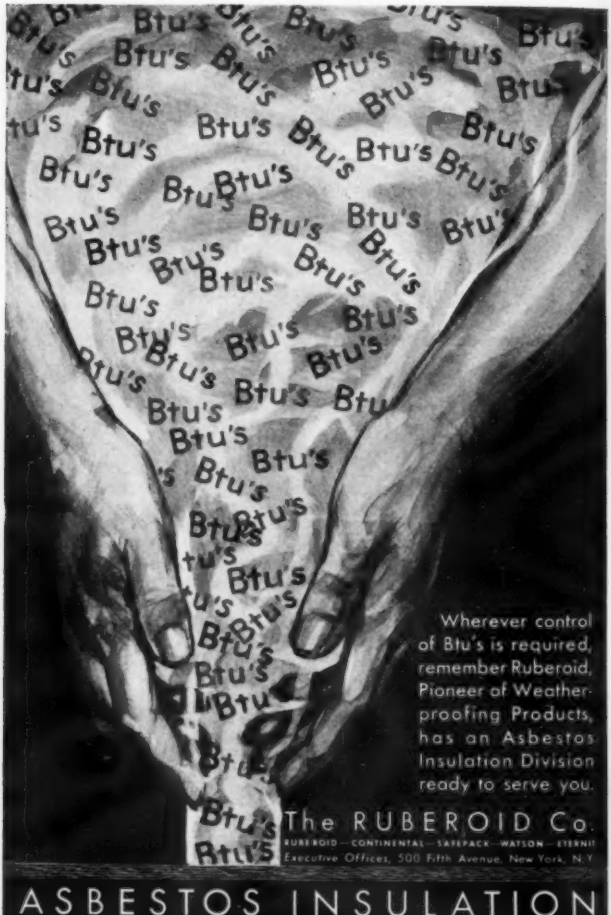
Described as the process of separating magnesia in the form of magnesium carbonate from a mixture of magnesium oxide and calcium carbonate, which comprises treating such mixture with a solution of ammonium sulfate to dissolve the magnesium oxide, boiling off ammonia from the resulting mixture and separating the calcium carbonate, adding carbonic acid gas and ammonia to the resulting solution, separating the precipitated magnesium carbonate and treating further quantities of the mixture of magnesium oxide and calcium carbonate with the ammonium sulfate liquor.

TRADE MARKS

This information is supplied by the National Trade Mark Co., Munsey Bldg., Washington, D. C., who will conduct free of charge an advance search on anly trade mark our readers may contemplate adopting.

Cross Country. No. 360,443. Sears Roebuck & Co., Chicago, Ill. For Brake Lining. Passed March 5th.

Yankee Brand, (and picture of the head of Uncle Sam). Serial No. 358,945. J. Ozurovich, Inc., New York City. For insulating coverings for pipes, the coverings comprising asbestos or a material simulating asbestos in one or more thicknesses either enclosed or not enclosed in a jacket of canvas or a canvas-like material. Passed March 5th.


Btu's
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For years, Ehret has specialized in the manufacture of efficient insulations covering the field from sub-zero temperatures to 2000°F. ENDURO COMBINATION HIGH TEMPERATURE INSULATION is the result of years of careful study of equipment requiring high heat-resisting insulations. It can be recommended without question for super-heated steam and all high heat service up to 2000°.

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WHO COMES HERE?

I am more powerful than the combined armies of the world.

I have destroyed more men than all the wars of the world.

I am more deadly than bullets, and I have wrecked more homes than the deadliest of siege guns.

I steal, in the United States alone, over $300,000,000 each year.

I spare no one, and I find my victims among the rich and poor alike; the young and old; the strong and weak; widows and orphans know me.

I loom up to such proportions that I cast my shadow over every field of labor from the turning of the grindstone to the moving of every railroad train.

I massacre thousands upon thousands of wage earners in a year.

I lurk in unseen places, and do most of my work silently. You are warned against me, but you heed not.

I am relentless. I am everywhere; in the home, on the street, in the factory, at railroad crossings, and on the sea.

I bring sickness, degradation, death, and yet few seek to avoid me.

I destroy, crush, maim, take all, and give nothing.

I am your worst enemy.

I AM CARELESSNESS!

Source Unknown

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